

## PATENT COOPERATION TREATY

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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY  
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference TP 1454 WO	FOR FURTHER ACTION See Form PCT/IPEA/416	
International application No. PCT/SE2003/001793	International filing date (day/month/year) 19.11.2003	Priority date (day/month/year) 13.12.2002
International Patent Classification (IPC) or national classification and IPC B29C 65/36		
Applicant Tetra Laval Holdings & Finance S.A. et al		

- This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
- This REPORT consists of a total of 6 sheets, including this cover sheet.
- This report is also accompanied by ANNEXES, comprising:
  - ☐ (sent to the applicant and to the International Bureau) a total of \_\_\_\_\_ sheets, as follows:
    - ☐ sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).
    - ☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
  - ☐ (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) \_\_\_\_\_, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

- This report contains indications relating to the following items:

- |                                     |              |   |
|-------------------------------------|--------------|---|
| <input checked="" type="checkbox"/> | Box No. I    | Basis of the report   |
| <input type="checkbox"/>            | Box No. II   | Priority  |
| <input type="checkbox"/>            | Box No. III  | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability  |
| <input type="checkbox"/>            | Box No. IV   | Lack of unity of invention  |
| <input checked="" type="checkbox"/> | Box No. V    | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/>            | Box No. VI   | Certain documents cited   |
| <input type="checkbox"/>            | Box No. VII  | Certain defects in the international application  |
| <input checked="" type="checkbox"/> | Box No. VIII | Certain observations on the international application   |

Date of submission of the demand  18.05.2004	Date of completion of this report  01.03.2005
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# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/SE2003/001793

## Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This report is based on a translation from the original language into the following language \_\_\_\_\_, which is the language of a translation furnished for the purposes of:

- ☐ international search (under Rules 12.3 and 23.1(b))  
☐ publication of the international application (under Rule 12.4)  
☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

☒ the international application as originally filed/furnished

☐ the description:

pages \_\_\_\_\_ as originally filed/furnished

pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

☐ the claims:

pages \_\_\_\_\_ as originally filed/furnished

pages\* \_\_\_\_\_ as amended (together with any statement) under Article 19

pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

☐ the drawings:

pages \_\_\_\_\_ as originally filed/furnished

pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

☐ the description, pages \_\_\_\_\_

☐ the claims, Nos. \_\_\_\_\_

☐ the drawings, sheets/figs \_\_\_\_\_

☐ the sequence listing (*specify*): \_\_\_\_\_

☐ any table(s) related to the sequence listing (*specify*): \_\_\_\_\_

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

☐ the description, pages \_\_\_\_\_

☐ the claims, Nos. \_\_\_\_\_

☐ the drawings, sheets/figs \_\_\_\_\_

☐ the sequence listing (*specify*): \_\_\_\_\_

☐ any table(s) related to the sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

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Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

## 1. Statement

Novelty (N)	Claims	<u>1-31</u>	YES
	Claims		NO
Inventive step (IS)	Claims		YES
	Claims	<u>1-31</u>	NO
Industrial applicability (IA)	Claims	<u>1-31</u>	YES
	Claims		NO

## 2. Citations and explanations (Rule 70.7)

Document cited in the International Search Report:

D1: SE 502829 A  
D2: US 6079185 A  
D3: US 5889263 A  
D4: US 5013878 A  
D5: EP 0426067 A1  
D6: US 5526561 A  
D7: EP 0642914 A1  
D8: EP 0480405 A1

One aim of the invention according to claims 1-31 is to, during manufacturing of packages, prevent induced current from leaking from a sealing area to unwanted areas of the packaging material, which could lead to the package being weakened.

Claims 1, 10 and 11

From D1, a method for manufacturing packages according to the preamble of claim 1 is known. The first package part (11, 82) in the application corresponds to the case (1) in D1 and the second package part (12, 82) in the application corresponds to the bottom (3) in D1 (see figure 1). The case in D1 comprises a thermoplastic coated material which also includes a heatable aluminium foil.

The case and the bottom are joined together with the help of two coils arranged alongside each other and along the joint area. These coils each produce a current, the two currents are conducted in opposite direction to each other, heat is generated in the aluminium foil in the packaging material and

.../...

## Supplemental Box

In case the space in any of the preceding boxes is not sufficient.  
Continuation of: BOX V

the thermoplastic material is thus melted and forms the joint between the case and the bottom.

The only thing that differs between the invention according to claim 1 and D1 is that the induction arrangement according to the invention comprises two conductors. Through these conductors an inducing current is fed in order to seal the package. In D1 the sealing is carried out with coils.

A person skilled in the art, with the knowledge of D1, is thus faced with the problem of finding an alternative way to manufacture packages.

It is considered obvious to a person skilled in the art to replace the coils in D1 with conductors. To transfer heat with both coils and conductors in the manufacturing of packages is well known for the skilled person and no unexpected technical effect occur with the mentioned change. Also, in the description of the application, when referring to the prior art, the heating current can be accomplished with magnetic fields but there are problems with the inducing current leaking from the "second joint" to the "first joint", thereby damaging the "first joint". This problem is also mentioned in D1 and it is also solved in D1 in the same manner as in the application, i.e. with the opposite flows (see e.g. the abstract of D1; page 4, lines 24-32 and page 7, line 31 - page 8, line 34).

Therefore, the invention according to claims 1, 10 and 11 is considered to lack inventive step with regard to D1.

Claims 2, 4-7, 9, 12, 13, 17, 22, 23, 27-29 and 31  
What is claimed in these claims is known per se from D1.

Therefore, the invention according to claims 2, 4-7, 9, 12, 13, 17, 22, 23, 27-29 and 31 lacks inventive step.

Claims 3, 8, 14-16, 18-21, 24-26 and 30  
What is claimed in these claims is considered to only represent structural solutions which are considered obvious for a person skilled in the art.

.../...

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Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of: BOX V

Therefore, the invention according to claims 3, 8, 14-16, 18-21, 24-26 and 30 is considered to lack inventive step with regard to D1.

D2-D8 represent the general state of the art.

The invention is industrially applicable.

**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**

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**Box No. VIII Certain observations on the international application**

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

In claim 23 the reference numbers to the figures seems to be misplaced.